

SHORT COMMUNICATION

Lectotypification of *Flindersia schottiana* F.Muell. (Rutaceae)

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Flindersia schottiana was described by Mueller (1862). The type citation reads “In silvis humidioribus Australiae orientalis a fluvio Hastings, usque ad sinum Repulse Bay.” [In humid forests of eastern Australia from Hastings River up to Repulse Bay]. This suggests he saw a minimum of two specimens; one from Hastings River and one from Repulse Bay.

There exist two specimens from “Cumberland Islands” in Australian herbaria (AVH 2021). Cumberland Islands is the name given to a group of several islands in Repulse Bay, north and north-east of Mackay. The specimen at BRI comprises a single leaflet and a portion of an inflorescence and has a hand-written label (in the hand of C.T. White) saying “*Flindersia schottiana* F.M. Cumberland Islands (Ex Nat. Herb. Melbourne)”. A specimen note by L.S. Smith explains the link between Repulse Bay and Cumberland Islands, and he attributed the collection to ‘probably’ Eugene Fitzalan in 1860. In that year, Fitzalan was a member of an expedition looking for the mouth of the Burdekin River, and he was employed by Mueller to collect botanical specimens (Dowe 2015). The specimen at MEL (MEL 0031815A), from which the BRI specimen was obviously excised, has the locality ‘Cumberland Islands’ but is without collector name or date. It includes an original label handwritten in pencil saying “*Aralia* fl white 40 to 50 ft Cumberland Islands”. Mueller subsequently added “*Flindersia schottiana* FM” in ink, and the word “*Aralia*” was crossed

out. The handwriting of the pencilled label is consistent with that of Fitzalan, as shown in Dowe (2015: 91).

There is only one known early specimen in Australian herbaria from ‘Hastings River’, namely an 1861 collection by H. Tozer at NSW (NSW 99599). Horatio Tozer (1816–1865) sent numerous plant specimens to Ferdinand Mueller in Melbourne, of which 44 are currently held in Australian herbaria (AVH 2021). All of these are held at MEL, with the exception of the *Flindersia* specimen, which was evidently sent to NSW sometime after the naming of the species.

Hartley (1969) chose a J.C. Bidwill specimen at K, without comment, as the lectotype of *Flindersia schottiana*. Bidwill collected many specimens from the Wide Bay district of southern Queensland in the late 1840s and early 1850s, and his specimens were sent to William Hooker in London and ultimately deposited in the Kew Herbarium.

The Shenzheng Code (Turland *et al.* 2018, Art. 9.3) states that a lectotype is one specimen or illustration designated from the original material. Article 9.4 further states: “For the purposes of this Code, original material comprises the following elements: (a) those specimens and illustrations (both unpublished and published prior to publication of the protologue) that the author associated with the taxon, **and that were available to the author** prior to, or at the time of, preparation of the description, diagnosis, or illustration with analysis (Art. 38.7 and 38.8) validating the name”.

It is well known that Mueller never visited Kew Herbarium, nor did he receive any specimens from there on loan. It follows that Hartley's lectotypification using the Bidwill specimen is not valid, as that specimen is not original material.

The Cumberland Island specimens (at BRI and MEL), and the Hastings River specimen (at NSW) are original material, as they were associated with the taxon by the author and were available to him prior to publication. Both of these gatherings have plant structures agreeing with the description given in the protologue. The Cumberland Islands specimen at MEL is here chosen as the lectotype as it a good quality specimen and it bears an original label.

Flindersia schottiana F.Muell., *Fragm.* 3: 25 (1862). **Type:** Queensland. Cumberland Islands, [September 1860, *E. Fitzalan s.n.*] (lecto: MEL 31815 [here designated]; isolecto: BRI [AQ342772]).

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References

- AVH (2021). Australasian Virtual Herbarium. <https://avh.chah.org.au>, accessed 21 February 2021.
- DOWE, J.L. (2015). *I saw a good deal of the country much more than any other collector*. An assessment of the botanical collections of Eugene Fitzalan (1830–1911). *Cunninghamia* 15: 87–133.
- HARTLEY, T.G. (1969). A revision of the genus *Flindersia* (Rutaceae). *Journal of the Arnold Arboretum* 50: 481–526.
- MUELLER, F. (1862). *Fragmenta Phytographiae Australiae* 3: 25. Government Printer: Melbourne.
- TURLAND, N.J., WIERSEMA, J.H., BARRIE, F.R., GREUTER, W., HAWKSWORTH, D.L., HERENDEEN, P.S., KNAPP, S., KUSBER, W.-H., LI, D.-Z., MARHOLD, K., MAY, T.W., MCNEILL, J., MONRO, A.M., PRADO, J., PRICE, M.J. & SMITH, G.F. (eds.) (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Koeltz Botanical Books: Glashütten.